



Report to the Committee on Armed
Services, U.S. Senate

September 2007

QUADRENNIAL DEFENSE REVIEW

Future Reviews Could
Benefit from
Improved Department
of Defense Analyses
and Changes to
Legislative
Requirements



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Why GAO Did This Study

The Department of Defense (DOD) is required by law to conduct a comprehensive examination of the national defense strategy, force structure, modernization plans, infrastructure, and budget every 4 years including an assessment of the force structure best suited to implement the defense strategy at low-to-moderate level of risk. The 2006 Quadrennial Defense Review (QDR), completed in February 2006, represents the first comprehensive review that DOD had undertaken since the military forces have been engaged in operations in Iraq and Afghanistan.

GAO was asked to assess (1) the strengths and weaknesses of DOD's approach and methodology for the 2006 QDR and (2) what changes, if any, in the QDR legislation could improve the usefulness of the report, including any changes that would better reflect 21st century security conditions. To conduct its review, GAO analyzed DOD's methodology, QDR study guidance, and results from key analyses and also obtained views of defense analysts within and outside of DOD.

What GAO Recommends

GAO recommends that for future QDRs, DOD develop methods to conduct a more thorough analysis of force structure and risk. GAO is also providing options for Congress to consider to revise QDR legislation. DOD generally agreed with our recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-07-709

To view the full report, including the scope and methodology, click on the link above. For more information, contact Janet A. St. Laurent at (202) 512-4402 or stlaurentj@gao.gov.

QUADRENNIAL DEFENSE REVIEW

Future Reviews Could Benefit from Improved Department of Defense Analyses and Changes to Legislative Requirements

What GAO Found

DOD's approach and methodology for the 2006 QDR had several strengths, but several weaknesses significantly limited the review's usefulness in addressing force structure, personnel requirements, and risk associated with executing the national defense strategy. Key strengths of the QDR included sustained involvement of senior DOD officials, extensive collaboration with interagency partners and allied countries, and a database to track implementation of initiatives. However, GAO found weaknesses in three key areas. First, DOD did not conduct a comprehensive, integrated assessment of different options for organizing and sizing its forces to provide needed capabilities. Without such an assessment, DOD is not well positioned to balance capability needs and risks within future budgets, given the nation's fiscal challenges. Second, DOD did not provide a clear analytical basis for its conclusion that it had the appropriate number of personnel to meet current and projected demands. During its review, DOD did not consider changing personnel levels and instead focused on altering the skill mix. However, a year after the QDR report was issued, DOD announced plans to increase Army and Marine Corps personnel by 92,000. Without performing a comprehensive analysis of the number of personnel it needs, DOD cannot provide an analytical basis that its military and civilian personnel levels reflect the number of personnel needed to execute the defense strategy. Third, the risk assessments conducted by the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, which are required by the QDR legislation, did not fully apply DOD's risk management framework because DOD had not developed assessment tools to measure risk. Without a sound analytical approach to assessing risk, DOD may not be able to demonstrate how it will manage risk within current and expected resource levels. As a result, DOD is not in the best position to demonstrate that it has identified the force structure best suited to implement the defense strategy at low-to-moderate risk.

Through discussions with DOD officials and defense analysts, GAO has identified several options for refining the QDR legislative language that Congress could consider to improve the usefulness of future QDRs, including changes to encourage DOD to focus on high priority strategic issues and better reflect security conditions of the 21st century. Congress could consider options to clarify its expectations regarding what budget information DOD should include in the QDR and eliminate reporting elements for issues that could be addressed in different reports. For example, the requirement to assess revisions to the unified command plan is also required and reported under other legislation. Further, some reporting elements such as how resources would be shifted between two conflicts could be eliminated in light of DOD's new planning approach that focuses on capabilities to meet a range of threats rather than on the allocation of forces for specific adversaries. GAO also presents an option to have an advisory group work with DOD prior to and during the QDR to provide DOD with alternative perspectives and analyses.

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Abbreviations

DOD Department of Defense
OSD Office of the Secretary of Defense
QDR Quadrennial Defense Review

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United States Government Accountability Office
Washington, DC 20548

September 14, 2007

The Honorable Carl Levin
Chairman
The Honorable John Warner
Committee on Armed Services
United States Senate

Among the 21st century challenges facing the Department of Defense (DOD) and the nation are difficult decisions concerning how to strike an affordable balance between national security and domestic needs. Aided by annual and supplemental funding of over \$400 billion per year since fiscal year 2003, DOD has been maintaining a high pace of operations while simultaneously transforming its military forces to meet emerging threats of the new security environment. However, as we have emphasized in previous reports, the federal government now faces increasing fiscal challenges, and DOD may face increasing competition for federal dollars.¹ The 2006 Quadrennial Defense Review (QDR) represents the first comprehensive review of the national defense strategy that DOD has undertaken since military forces have been engaged in operations in Iraq and Afghanistan. Further, the 2006 QDR provided an opportunity for DOD to move beyond its long-standing approaches and methods and identify the capabilities required to meet current, emerging, and future threats.

The QDR is a key component of national security planning. To ensure that the country's defense needs are reviewed periodically, Congress directed DOD to conduct comprehensive QDRs every 4 years to examine elements of the defense program and policies of the United States including the national defense strategy, force structure,² modernization, infrastructure, and budget plan.³ Key assessments required during the review that relate to national security planning include: (1) the force structure best suited to

¹See examples, GAO, *21st Century Challenges: Reexamining the Base of the Federal Government*, [GAO-05-325SP](#) (Washington, D.C.: February 2005) and *Fiscal Stewardship and Defense Transformation*, [GAO-07-600CG](#) (Washington, D.C.: Mar. 8, 2007).

²Force structure represents the numbers, size, and composition of the units that comprise U.S. forces, for example, ships or air wings.

³The National Defense Authorization Act for Fiscal Year 2000, Pub. L. No. 106-65 §901 (1999), codified at 10 U.S.C. §118.

implement the defense strategy at low-to-moderate level of risk; (2) the budget plan that would be required to provide sufficient resources to execute successfully the full range of missions called for in the national defense strategy at a low-to-moderate level of risk;⁴ (3) the Secretary of Defense's assessment of the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the national defense strategy; and (4) the Chairman of the Joint Chiefs of Staff's assessment of risk.

DOD submitted its report on the third quadrennial review to Congress on February 6, 2006.⁵ In the report, DOD concluded that "For the foreseeable future, steady-state operations including operations as part of a long war against terrorist networks and associated rotation base and sustainment requirements will be the main determinant for sizing U.S. forces." DOD also confirmed that for the long term it must size and shape U.S. forces for three main types of missions: homeland defense, the war on terrorism/irregular warfare,⁶ and conventional campaigns. In addition, DOD acknowledges that it must implement departmentwide change to ensure that organizational structures, processes, and procedures effectively support its strategic priorities. For example, DOD created the Defense Business Transformation Agency to integrate and oversee corporate-level business systems and initiatives in areas such as acquisition and logistics. Further, DOD reached several key decisions in the 2006 QDR that emphasized the need to continue changing the mix of joint capabilities and forces, such as stabilizing Army and Marine Corps active duty personnel at fiscal year 2006 congressionally authorized levels while increasing special operations forces in areas such as civil affairs units and special forces battalions, and military personnel for sea, air, and land teams.

DOD viewed the 2006 QDR as a refinement of the concepts it introduced in its 2001 QDR report, such as shifting the basis of force planning from focusing on specific adversaries and geographic locations to capabilities-

⁴DOD is also required to identify any additional resources (beyond those programmed in the current future-years defense program) required to achieve such a level of risk.

⁵The first Quadrennial Defense Review was submitted to Congress in May 1997 before the current legislation was enacted. The second Quadrennial Review was submitted on September 30, 2001, pursuant to 10 U.S.C. §118.

⁶DOD refers to irregular warfare as conflicts in which enemy combatants are not regular military forces of nation states.

based planning that identifies the capabilities the military will need to prepare for a range of potential military operations against unknown enemies. In the 2001 QDR report, DOD introduced a risk management framework designed to help address the tension between preparing for future threats and meeting the demands of the present with finite resources and to size, shape, and manage the department to accomplish its strategic priorities. DOD planned to use the framework in conducting the 2006 QDR.

Our work on past QDRs⁷ has shown long-standing weaknesses in DOD's assessment of force structure requirements. In past QDRs, DOD has not focused on longer-term threats and requirements for support capabilities, and its QDR reports have provided little information on some required issues, such as assumptions used in its analyses. Moreover, we have reported that force structure decisions were not clearly supported by analysis and linked to strategic plans. Further, in November 2005,⁸ we reported that DOD has not fully implemented a risk management approach and it planned to refine its risk management framework during the 2006 QDR.

In 2006, Congress passed legislation⁹ which added new reporting elements that will apply to the next QDR in 2010 as well as future QDRs. For example, the Secretary of Defense must establish an independent panel to conduct a postreview assessment of the QDR including the recommendations, assumptions used, and vulnerabilities of the strategy and force structure underlying the review. The new legislation also required that the Secretary of Defense submit to the Senate and House Committees on Armed Services quarterly reports on the status of the department's implementation of the 2006 QDR decisions, beginning in

⁷GAO, *Quadrennial Defense Review: Future Reviews Can Benefit from Better Analysis and Changes in Timing and Scope*, [GAO-03-13](#) (Washington, D.C.: Nov. 4, 2002) and GAO, *Quadrennial Defense Review: Opportunities to Improve the Next Review*, [GAO/NSIAD-98-155](#) (Washington, D.C.: June 25, 1998).

⁸GAO, *Defense Management: Additional Actions Needed to Enhance DOD's Risk-Based Approach for Making Resource Decisions*, [GAO-06-13](#) (Washington, D.C.: Nov. 15, 2005).

⁹John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, §1031 (2006).

January 2007.¹⁰ DOD submitted its first and second quarterly reports to Congress on January 31, 2007, and June 14, 2007, respectively.¹¹

You asked us to evaluate DOD's overall approach and supporting analysis in preparing the 2006 QDR and assess whether the QDR legislative requirements could be reevaluated to improve the usefulness of the report, including any changes needed to better reflect the security conditions of the 21st century. Accordingly, this report assesses (1) the strengths and weaknesses of DOD's approach and methodology for the 2006 QDR and (2) what changes, if any, in the QDR legislation could improve the usefulness of future QDRs.

To assess the 2006 QDR's strengths and weaknesses, we reviewed DOD's study guidance for the QDR and discussed the advantages and disadvantages of the review's process with DOD's officials. We also examined the methodology and results of the QDR key analyses and assessed how capabilities-based planning principles were applied during the assessments. To understand how the Secretary of Defense and the Chairman of the Joint Chiefs of Staff conducted their risk assessments, we reviewed the QDR's study guidance on assessing risk and held discussions with officials responsible for conducting risk assessments during the QDR. We reviewed DOD's quarterly report to Congress on the status of implementation for the 2006 QDR and post-QDR study team reports and implementation plans to review the processes that DOD has to implement QDR initiatives. Further, we held discussions with Office of the Secretary of Defense (OSD) officials responsible for monitoring the status of initiatives related to the QDR and ongoing work in the post-QDR study teams. To determine whether changes to the QDR legislation could improve the usefulness of future QDRs, we identified potential options from our analyses of prior QDRs and obtained the views of DOD civilian and military leaders who participated in the 2006 QDR as well as nongovernmental defense analysts, many of whom had played key roles in previous QDRs or in prior defense strategy reviews. We performed our review from May 2006 through May 2007 in accordance with generally

¹⁰Pub. L. No. 109-364, §1032 (2006).

¹¹Department of Defense, *Quarterly Report to Congress on Implementation of the 2006 Quadrennial Defense Review* (Washington, D.C.: Jan. 31, 2007) and *Second Quarterly Report to Congress on Implementation of the 2006 Quadrennial Defense Review* (Washington, D.C.: June 14, 2007).

accepted government auditing standards. Further information on our scope and methodology appears in appendix I.

Results in Brief

While DOD's approach and methodology for the 2006 QDR had several strengths, several weaknesses significantly limited the review's usefulness in addressing force structure, personnel requirements, and risk associated with executing the national defense strategy. On the positive side, the 2006 QDR benefited from the sustained involvement of key senior DOD officials who provided top-down leadership and oversight of the review process. Second, for the first time, DOD collaborated extensively with several major interagency partners, such as the Department of Homeland Security, as well as representatives of some allied countries to identify capabilities that would address current and future security threats. Third, leaders of the QDR's six study teams collaborated with each other to avoid duplication of work as they developed options to address DOD's challenges. Fourth, DOD has developed a database for monitoring the implementation of about 170 QDR initiatives, which range from changing organizational structures to enhancing military capabilities. However, weaknesses in three key areas—force structure analysis, assessment of personnel requirements, and assessment of the level of risk—hampered DOD's ability to determine the military force best suited to implement the defense strategy, which is a fundamental QDR goal, and thoroughly demonstrate how the risks associated with desired capabilities were evaluated. As a result, DOD is not well positioned to balance capability needs and risks within future budgets given the nation's serious budget pressures.

- First, although the 2001 QDR and the 2006 QDR study guidance emphasized that DOD planned to use capabilities-based planning to perform its analysis, DOD did not conduct a comprehensive, integrated assessment of alternative force structures. A key reason why DOD did not conduct such an assessment of its force structure was that it has not developed an integrated capabilities-based planning approach for comparing alternative force structures. Although DOD relied on several analyses of different parts of the force structure to make decisions about capabilities, it did not integrate these analyses into a comprehensive assessment. For example, while DOD conducted separate studies about tactical aircraft and ground forces, these were not integrated into an overall assessment of the numbers and size of units needed. Further, instead of assessing different levels of forces and their capabilities and evaluating the trade-offs among capabilities, DOD's primary assessment approach was to compare currently planned forces to potential scenarios

to determine whether and to what extent the planned force structure would experience shortages.

- Second, DOD did not provide a clear analytical basis for its conclusion that the number of personnel in the active and reserve components across the military departments was appropriate to meet current and projected operational demands. A key reason why DOD did not provide a clear basis for its personnel requirements is that existing personnel levels were taken as a given, and DOD focused on analyzing options on how to change the skill mix of active and reserve military personnel and civilians. Further, within 1 year after the QDR was published, the Secretary of Defense announced plans to seek congressional approval to increase Army and Marine Corps personnel by 92,000. These plans call into question the analytical basis of the QDR conclusion that the number of personnel and the size of the services' force structure were appropriate to meet current and future requirements. Without performing a comprehensive analysis of the number of personnel it needs, DOD cannot provide an analytical basis for its conclusion that its military and civilian personnel levels reflect the number of personnel needed to fill DOD's combat force structure and provide institutional support.
- Third, the risk assessments conducted by the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, which are required by the QDR legislation, did not fully apply DOD's risk management framework to demonstrate how risks associated with the proposed force structure were evaluated. Although tasked to use the risk management framework to demonstrate how risks were evaluated, several of the QDR study teams relied primarily on professional judgment to assess risks and examine the consequences of not investing in various capabilities. The Chairman was not tasked to use the risk management framework in assessing risks and did not choose to use it in his assessment. Our prior work has shown that performing a data-driven risk assessment can provide a guide to help organizations shape, focus, and prioritize investment decisions to develop capabilities. DOD did not conduct a comprehensive data-driven risk assessment because, according to DOD officials, it had difficulties in developing the department-level measures that would be necessary to assess risk and, as a result, the assessment tools were not available for use during the QDR.

Without thorough alternative force structure assessments, analyses of personnel requirements, and comprehensive risk assessments, DOD cannot provide comprehensive analytical support for significant decisions so that Congress can effectively evaluate the benefits, costs, and risks of alternative force structures and associated expenditures of federal

resources. We are recommending that the Secretary of Defense develop appropriate methods for conducting comprehensive, data-driven assessments in future QDRs of (1) the capabilities related to alternative force structures and related personnel requirements and (2) the risks associated with capabilities. DOD partially agreed with these recommendations. In its comments, DOD agreed that the 2006 QDR did not comprehensively assess alternatives to the planned force structure and instead assessed force requirements within capability areas. DOD stated that it is taking steps to provide more robust analysis of capabilities for future QDRs. However, until DOD comprehensively assesses alternative force structures that include examining alternatives across capability areas, it will not have the detailed information it needs to determine the force structure best suited to implement the defense strategy and to demonstrate risks associated with the planned force structure. DOD also agreed that the study teams inconsistently applied DOD's risk management framework, although it noted the senior leaders discussed a consolidated analysis of risk related to the proposed force structure as the QDR decisions were finalized in November 2005. DOD noted that further development of the department's risk management methodology is necessary to appropriately assess risks and it discussed some steps the department intends to take to identify performance goals and develop metrics. However, DOD did not provide detailed information or a time frame for the improvements it discussed.

Several options exist for refining legislative language that Congress could consider to focus QDR statutory requirements on strategic issues and eliminate some reporting elements that are already required under other laws and that may no longer be as useful in the new security environment. Specifically, some defense analysts we interviewed suggested requiring DOD to focus its efforts on broad strategic issues and provide more information on the analytic basis for its key assumptions and strategic planning decisions. In addition, some defense analysts suggested that to facilitate congressional oversight and decision making, the QDR legislation should clarify Congress' expectations for information related to budget plans and planned trade-offs among capabilities. In addition, most analysts agreed that many of the detailed requirements requiring reporting on more operational issues, such as reporting on the unified command plan, may divert the QDR's focus from strategic issues and should be eliminated from the QDR and assessed separately. Finally, most defense analysts we interviewed believe that recent legislation, which requires DOD to appoint

an independent panel to complete a post-QDR assessment of the results of future QDRs,¹² could be expanded to include providing advice to the Secretary of Defense before or during the QDR process. We are suggesting that Congress consider options to (1) clarify expectations for how the QDR should address the budget plan that supports the national defense strategy and (2) eliminate some reporting requirements. DOD agreed with these suggestions. In our draft report we also suggested that Congress consider broadening the scope of the post-QDR assessment panel for future QDRs to include providing advice before or during the QDR process. In its written comments, DOD stated that having an independent panel that could provide advice and alternatives to the Secretary of Defense before and during the QDR process would be useful. However, DOD raised the concern that having the same panel advise the department before and during the QDR as well as critiquing the results could create mistrust between the department's leadership and the panel. To reflect DOD's concern, we have revised our matter to state that Congress should consider requiring an independent panel to provide advice and alternatives to the Secretary of Defense before and during the QDR. This change is intended to provide Congress with the flexibility to establish separate independent panels prior to and following the QDR.

Background

In May 1995, the Commission on Roles and Missions of the Armed Forces proposed the idea of a comprehensive quadrennial review by DOD of the country's defense strategy and force structure. In August 1995, the Secretary of Defense endorsed the idea, and the following year legislation directed DOD to conduct the 1997 QDR.¹³

Congress created a permanent requirement for DOD to conduct a QDR every 4 years in the National Defense Authorization Act for Fiscal Year 2000, passed in 1999.¹⁴ According to this legislation, DOD was to conduct a comprehensive examination of the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the country's defense program and policies with a view toward determining and expressing the nation's defense strategy and establishing a defense program for the next 20 years. Originally the

¹²Pub. L. No. 109-364 §1031 (2006).

¹³National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201 §923 (1996).

¹⁴Pub. L. No. 106-65 §901 (1999), codified at 10 U.S.C. §118.

legislation identified 14 specific issues for DOD to address, such as a comprehensive discussion of the national defense strategy of the United States and the force structure best suited to implement that strategy at a low-to-moderate level of risk. In addition, it allowed the Secretary of Defense to review any other issues he considers appropriate. The legislation in effect during the 2006 QDR reflected several amendments to the original legislation, for example, requiring DOD to assess the national defense mission of the Coast Guard. (See app. II for the legislation in effect during the 2006 QDR.)

Among other requirements, the 1999 QDR legislation required that the Secretary of Defense assess the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the national defense strategy. In the 2001 QDR report, DOD introduced a new risk management framework that identified four areas of risk—operational, force management, future challenges, and institutional. According to the 2001 QDR report, the framework would enable DOD to address the tension between preparing for future threats and meeting the demands of the present with finite resources. Further, the framework was intended to ensure that DOD was sized, shaped, postured, committed, and managed with a view toward accomplishing the strategic priorities of the 2001 QDR.

Future QDRs will be affected by the new reporting elements added to the QDR legislation by the John Warner National Defense Authorization Act for Fiscal Year 2007.¹⁵ Specifically, the legislation requires DOD to establish an independent review panel to conduct an assessment of the QDR no later than 6 months before the date that DOD's report on the QDR is submitted to Congress. The panel is required to submit, within 3 months after the date on which the QDR is submitted, an assessment of the review, including its recommendations, the stated and implied assumptions incorporated in the review, and the vulnerabilities of the strategy and force structure underlying the review. The legislation also specifies that the QDR review should not be constrained to comply with the budget submitted to Congress by the President. In addition, the legislation added several specific issues that DOD is required to address such as providing the specific capabilities, including the general number and type of specific military platforms, needed to achieve the strategic and warfighting objectives. Lastly, the authorization act directs DOD to submit

¹⁵Pub. L. No. 109-364, §§1031, 1032 (2006).

to the Senate and House Armed Services Committees a report on the implementation of recommendations identified in the 2006 QDR report no later than 30 days after the end of each fiscal year quarter.¹⁶ (See app. III for a summary of additions to the QDR legislation, 10 U.S.C. §118 as a result of the John Warner National Defense Authorization Act for Fiscal Year 2007.)

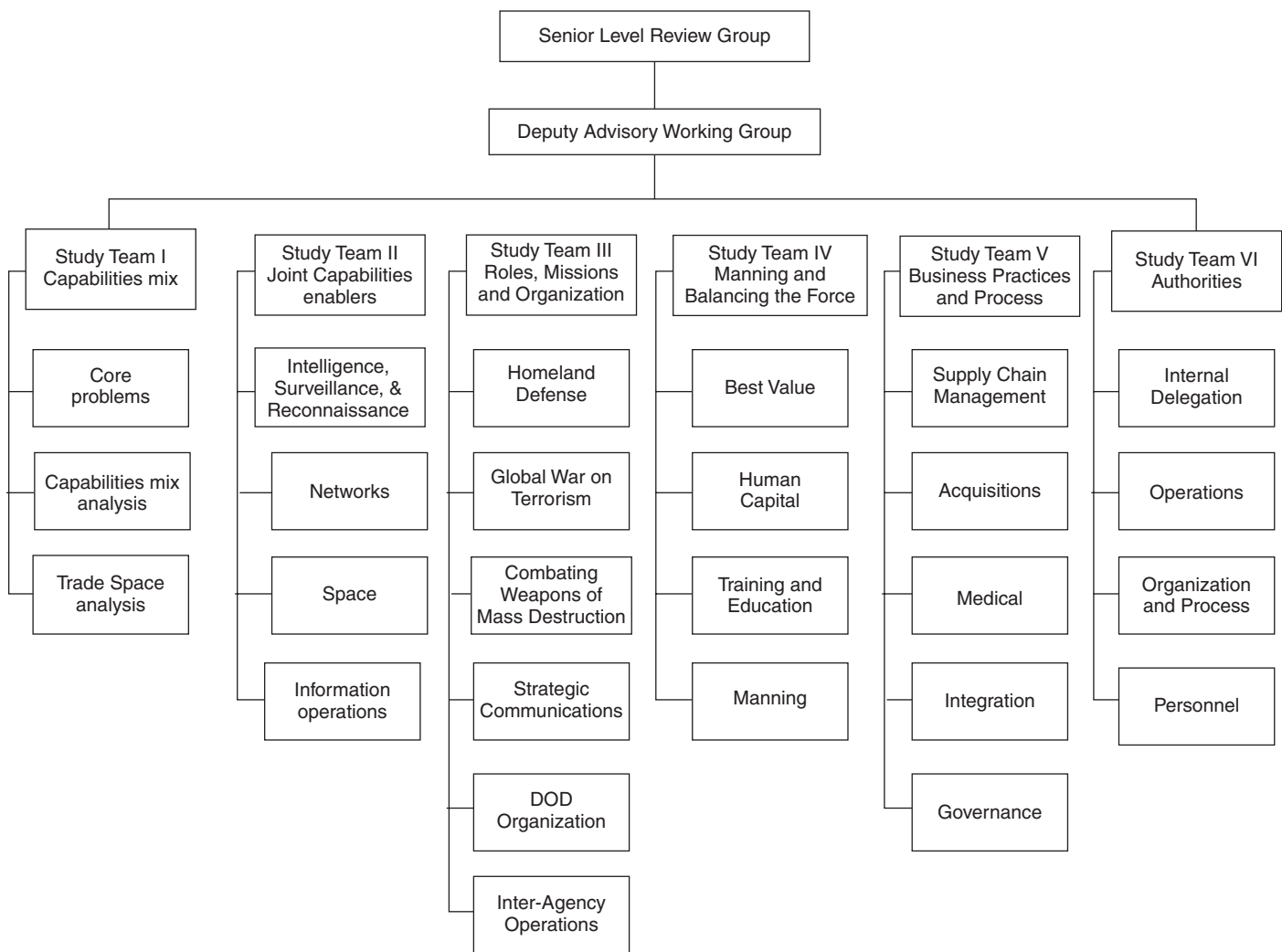
DOD considers the 2006 QDR a refinement of its predecessor 2001 QDR, which detailed the department's intent to shift the basis of defense planning from the long-standing "threat-based" model, which focused on specific adversaries and geographic locations, to a "capabilities-based" construct that seeks to prepare for a range of potential military operations against unknown enemies. According to the 2001 QDR report, the capabilities-based model focuses on how an adversary might fight rather than specifically who the adversary might be or where the war might occur.

The Under Secretary of Defense (Policy) had the lead role in conducting the 2006 QDR. The Joint Staff played a supporting role in the process and had primary responsibility for leading the analytical work to support the Chairman of the Joint Chief of Staff's risk assessment. In March 2005, the Secretary of Defense approved guidance, called the Terms of Reference, for the review. The Terms of Reference identified four focus areas and provided guidance to senior officials to develop capabilities and make investment decisions to shape the future force and reduce risks in these areas. The four focus areas were 1) defeating terrorist networks, 2) defending the homeland in depth, 3) shaping the choices of countries at strategic crossroads, and 4) preventing hostile states and nonstate actors from acquiring or using weapons of mass destruction. During the spring of 2005, DOD senior leaders held meetings on the focus areas with interagency partners from across the federal government and international allies to identify the potential threats and the types of capabilities needed to address the challenges associated with the focus areas. Officials from the intelligence community, such as the Defense Intelligence Agency, provided threat assessments for each of the focus areas.

¹⁶DOD submitted its first and second quarterly reports to Congress on January 31, 2007, and June 14, 2007, respectively. This reporting requirement will terminate upon the publication of the next QDR or when the Secretary of Defense notifies the Senate and House Armed Services Committees in writing that implementation is complete for the 2006 QDR recommendations.

The Terms of Reference also established six study teams to assess capabilities associated with the QDR focus areas and directed the teams to develop options to reduce risk in these areas. Top-level civilian and military leaders from OSD and Joint Staff led the study teams, which included officials from the services and Combatant Commands. The Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff co-chaired a senior level group, which was eventually referred to as the Deputy's Advisory Working Group, and this group reviewed the work of the study teams during the summer and fall of 2005. Other members of the review group included the Under Secretaries of Defense, the services' Under Secretaries, the services' Vice Chief of Staffs, and the Deputy Commander, U.S. Special Operations Command. The Deputy Secretary and his working group determined what information each study team would provide to the senior-level review group, which was led by the Secretary of Defense. Figure 1 shows the structure that OSD established to conduct the QDR.

Figure 1: Organizational Structure for the Development of the 2006 QDR



Source: DOD.

According to the 2006 QDR report, the foundation of this QDR is the National Defense Strategy, published in March 2005. The Secretary of Defense's National Defense Strategy is implemented through the National Military Strategy, which is developed by the Chairman of the Joint Chiefs of Staff. The National Military Strategy provides focus for military activities by defining a set of interrelated military objectives from which the service chiefs and combatant commanders identify desired capabilities and against which the Chairman of the Joint Chiefs of Staff assesses risk.

The QDR's Approach Had Several Strengths but Analytical Weaknesses Limited Its Usefulness in Assessing Force Structure, Personnel Requirements, and Risk

While DOD's approach and methodology for the 2006 QDR had several strengths, several weaknesses significantly limited the review's usefulness in addressing force structure, personnel requirements, and risk associated with executing the national defense strategy. On the positive side, the 2006 QDR benefited from the sustained involvement of key senior DOD officials, interagency and allied participation, and internal collaboration among the QDR's participants. However, weaknesses in the assessment of three key areas—force structure, personnel requirements, and risk—hampered DOD's ability to undertake a fundamental reassessment of the national defense strategy and U.S. military forces. As a result of these weaknesses, Congress lacks assurance that DOD has conducted the analysis needed to determine the force best suited to implement the defense strategy. Further, DOD is not well positioned to demonstrate to Congress how it considered risks and made difficult trade-offs among its capabilities to balance investments within future budgets, given the nation's fiscal challenges.

Senior Leadership Involvement, Interagency and Allied Participation, Internal Collaboration, and a System to Monitor Implementation Provided Benefits

DOD's approach for the 2006 QDR benefited from several strengths. First, key senior DOD leaders maintained sustained involvement throughout the review. As we have noted in previous reports,¹⁷ best practices clearly indicate that top-level leadership is crucial for engineering major changes in an organization. Top leaders establish the framework for change and provide guidance and direction to others to achieve change. During the 2006 QDR process, the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff co-chaired a senior level review group, now referred to as the Deputy's Advisory Working Group, to review and approve initiatives of varying complexity presented by the six study team leaders and leaders of specialized issue areas, such as special operations forces. According to an official in the Office of the Secretary of Defense, during most of the QDR process, this senior level group met several times a week to review the study teams' options and provide guidance to the teams to ensure that the QDR's strategic priorities were addressed. Since the QDR report was issued in February 2006, the Deputy's Advisory Working Group continues to meet regularly to oversee implementation of the QDR's strategic priorities, such as improving DOD's

¹⁷For examples, GAO, *DOD's High Risk Areas Successful Business Transformation Requires Sound Strategic Planning and Sustained Leadership*, [GAO-05-520T](#) (Washington, D.C.: Apr. 13, 2005), and *Force Structure Army Needs to Provide DOD and Congress More Visibility Regarding Modular Force Capabilities and Implementation Plans*, [GAO-06-745](#) (Washington, D.C.: Sept. 6, 2006).

management structures and business processes to support effective decision making.

Second, DOD collaborated with interagency partners, such as the Department of Homeland Security, and U.S. international allies, such as the United Kingdom, to discuss potential strategic challenges and determine capabilities that are required to meet current and future challenges. According to DOD officials, senior officials from the Department of Homeland Security including the U.S. Coast Guard and the Departments of Energy, State, and other federal agencies participated in DOD's discussions establishing the strategic direction of the QDR during the spring of 2005. U.S. agency officials discussed with DOD officials the types of capabilities and investments needed to reduce risk in the QDR's four focus areas—defeating terrorist networks, defending the homeland in depth, shaping the choices of countries at strategic crossroads, and preventing hostile states and nonstate actors from acquiring or using weapons of mass destruction. For example, DOD officials who coordinated the QDR stated that U.S. Coast Guard officials identified current and planned maritime defense capabilities as part of DOD's discussion on combating weapons of mass destruction. Further, officials from U.S. allies, such as the United Kingdom, participated in the discussions to share their perspectives about how DOD, its allies, and global partners could address the nontraditional, asymmetric warfighting challenges of the 21st century, such as preventing the acquisition or use of weapons of mass destruction by nonstate actors. As a result of contributions from the interagency partners and allies, DOD was in a better position to identify and develop the four focus areas that eventually shaped the scope of the QDR.

Third, leaders of the six study teams collaborated with each other to avoid duplication of work as they developed options to address challenges associated with the focus areas. The study team leaders held weekly meetings to discuss whether their issues could be better addressed by another study team, the progress of their work plans, and whether they could provide each other with mutually supporting analysis. Further, a group of senior officials, led by an official in the Office of the Secretary of Defense for Policy, attended the study teams' weekly meetings to ensure that the options addressed the capabilities associated with the four focus areas and helped identify overlaps or gaps in the development of options. For example, three study teams, which developed and identified options related to force structure, personnel requirements, and roles and missions respectively, coordinated their work to minimize any overlap and identify any gaps in the development of options to increase the number of military

and civilian personnel proficient in key languages such as Arabic, Farsi, and Chinese.

Fourth, following the release of the 2006 QDR, the Deputy Secretary of Defense requested that officials in OSD establish procedures to track the implementation of the 2006 QDR initiatives which encompassed a range of military capabilities, from implementing its new personnel management system to developing a new land-based, penetrating long-range strike capability by 2018. Senior officials from the Office of the Director, Administration and Management created a departmentwide database and established criteria to categorize the implementation status of each initiative. Specifically, implementation of an initiative was categorized as “completed” if the initiative was fully implemented or if DOD had taken actions that officials determined as having met the intent of the initiative, even though the initiative may take years to fully implement. OSD officials have provided periodic briefings on the status of QDR initiatives to the Deputy Secretary of Defense and his advisory group since the publication of the 2006 QDR report. DOD reported to Congress in January 2007 that it had completed implementation of about 90, or 70 percent, of the 130 initiatives.¹⁸ Further, in January 2006 at the end of the QDR process, the Deputy Secretary of Defense identified eight study areas and established a process to continue developing DOD’s approaches for the issues associated with these study areas.¹⁹ According to senior DOD officials, these areas identified for post-QDR study were generally complex and involved multiple organizations, such as developing interoperable strategic communications.²⁰ The Deputy Secretary provided guidance for the teams

¹⁸Department of Defense, *Quarterly Report to Congress on Implementation of the 2006 Quadrennial Defense Review* (Washington, D.C.: Jan. 31, 2007). We did not find documentation in DOD officials’ briefings to the Deputy’s Advisory Working Group or DOD’s report to Congress that indicates how effectively DOD is implementing the initiatives, such as providing information on whether the activity is on schedule or assessing the effectiveness of the initiatives. Further, in June 2007, DOD reported that it had closed an additional 19 initiatives, which brings the number of QDR initiatives that DOD considers completed to about 110, or 85 percent, of the 130 initiatives.

¹⁹The eight post-QDR study teams are Authorities; Irregular Warfare; Building Partnership Capacity; Strategic Communications; Institutional Reform and Governance; Joint Command and Control; Locate, Tag, Track; and Sensor-based Management of Intelligence, Surveillance, and Reconnaissance Enterprise.

²⁰For example, DOD officials, including the Assistant Secretary for Public Affairs and the Chairman of the Joint Chief of Staff Director for Strategic Communication, plan to develop formal processes that will enable DOD to better coordinate and synchronize the assessment and delivery of information to key allies and coalition partners.

that included requirements to (1) define objectives, timelines, and performance metrics and (2) establish an oversight process as part of an implementation plan to ensure the decisions made during the QDR were achieved. According to DOD officials, DOD plans to provide Congress with information about the status of the post-QDR study teams' implementation in its quarterly reports. For example, in DOD's January 2007 report to Congress, DOD reported that one of the Institutional Reform and Governance study team's objectives is to continue developing concepts and overseeing initiatives related to reforming governance and management functions such as capabilities-based planning.

Weaknesses in Assessment of Force Structure, Personnel Requirements, and Risk Limited the QDR's Usefulness in Linking Force Structure to the Defense Strategy and Addressing Affordability Challenges

Weaknesses in the assessment of three key areas—force structure, personnel requirements, and risk—significantly limited the review's usefulness in reassessing the force structure best suited to implement the defense strategy at low-to-moderate level of risk, which is a key requirement of the review. Our previous reporting on DOD's prior QDRs and other work has shown that weaknesses in establishing a substantive basis for force structure, personnel requirements, and risk have been long-standing issues for the department. Further, until DOD can demonstrate an analytical basis for its force structure and personnel requirements, it will not be well-positioned to balance capability needs within budgets that are likely to be constrained in the future, given the nation's fiscal challenges.

DOD Did Not Conduct a Comprehensive, Integrated Analysis of Alternative Force Structures Using a Capabilities-Based Approach

Although the 2006 QDR study guidance emphasized that DOD would use capabilities-based planning to focus on how a range of potential enemies might fight, DOD did not conduct a comprehensive, integrated assessment of alternative force structures during the QDR using a capabilities-based approach. Based on our discussions with DOD officials and our review of DOD documents and non-DOD published studies, a capabilities-based approach requires a common understanding of how a capability will be used, who will use it, when it is needed, and why it is needed. Further, each capability should be assessed based on the effects it seeks to generate and the associated operational risk²¹ of not having the capability. A capabilities-based approach also seeks to identify capability gaps²² or

²¹DOD defines operational risk as the ability to achieve military objectives in a near-term conflict or other contingency.

²²According to DOD, a capability gap is the military inability to achieve a desired effect by performing a set of tasks under specified standards and conditions. The gap may be the result of not having an existing capability or the lack of proficiency or sufficiency in an existing capability.

redundancies and make trade-offs among the capabilities in order to efficiently use fiscal resources. In table 1 we identify several key elements of a capabilities-based planning approach and provide descriptions of these elements.

Table 1: Key Elements of Capabilities-Based Planning

Key element	Description
Establish an organizational structure	<ul style="list-style-type: none"> Identify roles, responsibilities, and organizational changes Establish methods for recording and communicating decisions and tracking their execution
Establish an analytic framework	<ul style="list-style-type: none"> Use traceable and analytically-based data, information sources, and standards consistently when conducting assessments Refine and further develop an approach to assess risk
Develop a national defense strategy	<ul style="list-style-type: none"> Identify strategic goals so capabilities can be developed to support these goals
Develop a wide range of specific and generic threats	<ul style="list-style-type: none"> Identify potential threats by using intelligence sources, strategic studies, and professional military experience
Develop a wide range of scenarios	<ul style="list-style-type: none"> Develop scenarios that address various time frames and do not solely focus on one or two major conventional campaigns Ensure that the scenarios challenge the force and do not simplify existing weaknesses and problems, e.g., do not assume that overseas locations have a developed infrastructure Identify the capabilities that are needed to perform missions outlined in the scenarios
Conduct a capability survey	<ul style="list-style-type: none"> Identify the capabilities within the existing and planned force Identify any gaps or excesses
Develop capability options	<ul style="list-style-type: none"> Perform comprehensive assessments to determine trade-offs among the capabilities, such as identifying which capabilities can be substituted with other capabilities Link capability options to strategic goals to determine whether the goals are being addressed Assess the risk of each trade-off using a data-driven approach Prioritize the best balance of investment across major capability areas
Link capability solutions to well-defined budget, acquisition, performance plans	<ul style="list-style-type: none"> Identify the near- and long-term budgetary implications for the capability options Develop detailed acquisition plans Establish mechanisms to establish clear authority and accountability, milestones, and performance measures

Source: GAO analysis of DOD and non-DOD capabilities-based planning studies.

DOD's primary basis for assessing the overall force structure best suited to implement the national defense strategy, according to several DOD officials, was a Joint Staff-led study known as Operational Availability 06. The study compared the number and types of units in DOD's planned force structure to the operational requirements for potential scenarios to determine whether and to what extent the planned force structure

would experience shortages. However, the Joint Staff's Operational Availability 06 Study did not assess alternatives to planned force structures and evaluate trade-offs among capabilities.

In conducting the Operational Availability 06 Study, the Joint Staff completed two different analyses. The first analysis, referred to as the base case, relied on a set of operational scenarios that created requirements for air, ground, maritime, and special operations forces. During this study, the Joint Staff examined requirements for a broad range of military operations over a 7-year time frame. Two overlapping conventional campaigns served as the primary demand for forces with additional operational demands created by 23 lesser contingency operations, some of which represented the types of operations that military forces would encounter while defending the homeland and executing the war on terrorism. The Joint Staff then compared the number of military units in DOD's planned air, ground, maritime, and special operations forces to the operational demands of the scenarios. The Joint Staff made two key assumptions during the analysis. First, the Joint Staff assumed that reserve component units could not deploy more than once in 6 years. Second, the Joint Staff assumed that while forces within each service could be reassigned or retrained to meet shortfalls within the force structure, forces could not be substituted across the services.²³ Results of the Joint Staff's first analysis showed that maritime forces were capable of meeting operational demands and air, ground, and special operations forces experienced some shortages.

In response to a tasking from top-level officials the Joint Staff performed a second analysis that developed a different set of operational demands reflecting the high pace of operations in Iraq. In this analysis, the Joint Staff used the same 2012 planned force structure that was examined in the first analysis. When it compared the operational demands that were similar to those experienced in Iraq with DOD's planned force structure, the Joint Staff found that the air, ground, maritime, and special operations forces experienced shortages and they could only meet operational demands for a security environment similar to Iraq, one conventional campaign, and 11 of the 23 lesser contingency scenarios.

²³Our reporting shows that DOD's experience has been different than this assumption. To meet operational demands in Iraq and Afghanistan, DOD has relied increasingly on reassigning and retraining personnel to meet requirements. See [GAO-06-962](#).

While the Operational Availability 06 Study had some benefits, several weaknesses significantly limited the study's usefulness for integrating a capabilities-based approach that assessed force structure options. On the positive side, top leaders maintained sustained involvement in the Operational Availability Study; for example, based on their guidance, the Joint Staff conducted a second analysis that depicted operational demands, which more accurately represented the current security environment. That study demonstrated that significant shortages in military forces exist when forces are not retrained or reassigned to meet operational demands. However, weaknesses in the study's methodology to assess different levels of force structure and use a capabilities-based planning approach limited the study's usefulness in reassessing the fundamental relationship between the national defense strategy and the force structure best suited to implement the strategy. First, the Joint Staff did not vary the number and types of units to demonstrate that it assessed different levels or mixes of air, ground, maritime, and special operations force structure in its second analysis. Second, the Joint Staff did not identify capabilities of the force structure and make recommendations about trade-offs among capabilities.

Further, concurrent with the Operational Availability 06 Study, DOD conducted separate assessments of some segments of its force structure to inform decisions about investments for capabilities. For example, DOD conducted a departmentwide study that assessed options about different levels and types of tactical air assets, such as the Joint Strike Fighter. However, in this study DOD did not fully address whether and to what extent future investment plans are affordable within projected funding levels, and in April 2007, we reported that DOD does not have a single, comprehensive, and integrated investment plan for recapitalizing and modernizing fighter and attack aircraft.²⁴ In another example, DOD also conducted a study to determine whether ground forces in the Army, Marine Corps, and Special Operations Command could meet operational demands for a broad range of scenarios without relying extensively on reserve personnel.²⁵ However, options to increase ground forces were not part of the study's scope, and the implications of the ongoing operations in

²⁴GAO, *Tactical Aircraft: DOD Needs a Joint and Integrated Investment Strategy*, [GAO-07-415](#) (Washington, D.C.: Apr. 2, 2007).

²⁵In December 2004, the Deputy Secretary of Defense directed the Quadrennial Defense Review to review ground forces capability.

Iraq, such as the number of active brigade combat teams that would be needed and their length of time in theater, were not fully considered.²⁶

A key reason why DOD did not use an integrated capabilities-based approach to assessing force structure options is that DOD did not have a unified management approach to implement capabilities-based planning principles into the QDR assessment. At the time of the QDR, no one individual or office had been assigned overall responsibility and authority necessary for implementing an integrated capabilities-based planning approach. Further, DOD had not provided comprehensive written guidance to implement departmentwide methods for capabilities-based planning that specifies the need to identify capabilities at the appropriate level of detail, identify redundant or excess capabilities that could be eliminated, facilitate trades among capabilities, assess and manage risk, and balance decisions about trade-offs with near- and long-term costs. Currently, DOD is undertaking some initiatives related to capabilities-based planning. However, these select initiatives do not represent the type of comprehensive, unified management approach needed to assess the force structure requirements to address a range of potential military operations against unknown enemies. For example:

- The Joint Staff initiated the Joint Capabilities Integration and Development System in 2003 to assess gaps in joint capabilities and recommend solutions to resolve those gaps. Under this system, boards comprised of high-level DOD civilians and military officials are convened to identify future capabilities needed in key functional areas, such as battle space awareness, and to make recommendations about trade-offs among air, space, land, and sea platforms. While this process may be important to assess gaps in joint warfighting capabilities, we have reported that its focus is to review and validate the initial need for proposed capabilities. However, we have also reported that the process is not yet functioning as envisioned to define gaps and redundancies in existing and future military capabilities across the department and to identify solutions to improve joint capabilities.²⁷ Further, we reported that programs assessed by the Joint Staff's process build momentum and move toward starting product development with little if any early department-level

²⁶The operational demands related to Iraq's security environment were not part of DOD's planning scenarios used in the ground forces study.

²⁷GAO, *Force Structure: Joint Seabasing Would Benefit from a Comprehensive Management Approach and Rigorous Experimentation before Services Spend Billions on New Capabilities*, [GAO-07-211](#) (Washington, D.C.: Jan. 26, 2007).

assessment of the costs and feasibility.²⁸ According to senior DOD officials, the Joint Staff's process does not thoroughly link capabilities to the strategic priorities identified in the QDR.

- The Deputy Secretary of Defense tasked the Institutional Reform and Governance post-QDR study team to develop departmentwide approaches that would allow DOD to integrate and facilitate its capabilities-based planning initiatives. Based on the study team's work, in March 2007 the Deputy Secretary of Defense tasked several DOD organizations to develop plans to facilitate a capabilities-based planning approach. For example, the Joint Requirements Oversight Council is tasked with developing a process for identifying capability priorities and gaps at the appropriate level of detail and ranking all capabilities from high to low priority by October 2007. Further, the Deputy Secretary of Defense has reaffirmed the department's commitment to portfolio management and expanded the scope of responsibility for the four capability portfolio test case managers.²⁹ Among their new responsibilities, each portfolio manager is required to provide the Deputy's Advisory Working Group with an independent portfolio assessment to inform investment decisions during DOD's fiscal year 2009 program review. DOD may establish more portfolios as the roles and responsibilities of the existing managers evolve and operate in DOD's existing decision processes, such as the Deputy's Advisory Working Group.

DOD made some changes to the current force structure to address perceived gaps in capabilities based on the QDR review, although these did not represent major changes to the composition of the existing force structure. For example, among the key force-structure-related decisions highlighted in the QDR were to (1) increase Special Operations forces by 15 percent and the number of Special Forces Battalions by one-third; (2) expand Psychological Operations and Civil Affairs units by 3,700 personnel, a 33 percent increase; (3) develop a new land-based penetrating long-strike capability to be fielded by 2018 and fully modernize the current

²⁸GAO, *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, [GAO-07-388](#) (Washington, D.C.: Mar. 30, 2007).

²⁹In September 2006 the Deputy Secretary of Defense announced a new DOD management effort to explore whether managing groups of military capabilities across the entire department will enable DOD to improve the interoperability of future capabilities, minimize capability redundancies and gaps, and maximize the effectiveness of capabilities. DOD identified the following test cases: battlespace awareness, joint command and control, joint net centric operations, and joint logistics.

DOD Did Not Conduct a Thorough Review of Personnel Requirements

bomber force (B-52s, B-1s, and B-2s); and (4) decrease the number of active component brigade combat teams from 43 to 42 and the number of planned Army National Guard brigade combat teams from 34 to 28. In January 2007—about a year after the QDR was completed—DOD approved the Army’s plan to increase the number of active component brigade combat teams to 48. Since DOD did not conduct a comprehensive, data-driven assessment of force structure alternatives during the QDR, it is not in the best position to assure itself or Congress that it has identified the force best suited to execute the national defense strategy.

Although DOD concluded in the 2006 QDR report that the size of today’s forces—both the active and reserve components across all four military services—was appropriate to meet current and projected operational demands, it did not provide a clear analytical basis for its conclusion. In January 2007, the Secretary of Defense announced plans to permanently increase the size of the active component Army and the Marine Corps by a total of 92,000 troops over the next 5 years. But again, DOD did not identify the analysis that it used to determine the size of the increase. In February 2005,³⁰ we recommended that DOD review active personnel requirements as part of the QDR, and in doing so, discuss its conclusions about the appropriate personnel levels for each of the services and describe the key assumptions guiding the department’s analysis, the methodology used to evaluate requirements, and how the risks associated with various alternative personnel force levels were evaluated. While DOD agreed with our recommendation, it did not perform a comprehensive, data-driven analysis of the number of personnel needed to implement the defense strategy as part of its 2006 QDR. Until DOD performs a comprehensive review of personnel requirements, it cannot effectively demonstrate to Congress a sound basis for the level of military and civilian personnel it requests.

Our prior work has shown that valid and reliable data about the number of personnel required to meet an agency’s needs are critical because human capital shortfalls can threaten an organization’s ability to perform missions efficiently and effectively.³¹ Data-driven decision making is one of the critical factors in successful strategic workforce management. High-performing organizations routinely use current, valid, and reliable data to

³⁰GAO-05-200.

³¹GAO, *A Model of Strategic Human Capital Management*, GAO-02-373SP (Washington, D.C.: Mar.15, 2002).

inform decisions about current and future workforce needs, stay alert to emerging mission demands, and remain open to reevaluating their human capital practices. Further, federal agencies have a responsibility to provide thorough analytical support over significant decisions affecting requirements for federal dollars so that Congress can effectively evaluate the benefits, costs, and risks.

Rather than conducting a comprehensive assessment of its personnel requirements, DOD's approach to active and reserve military personnel and civilian personnel levels was to limit growth and initiate efforts to use current personnel levels more efficiently. Consequently, the study team that was assigned to review issues related to manning and balancing the force took the existing force size as a given. From that basis, the study team identified alternative courses of action for changing the mix of specific skills, such as civil affairs, in the active and reserve components to meet future operational requirements. The team also considered whether changes in the mix of skills would require more military and civilian personnel at headquarters staffs. While these reviews are important for understanding how to use the force more efficiently, they cannot be used to determine whether U.S. forces have enough personnel to accomplish missions successfully because these reviews did not systematically assess the extent to which different levels of end strength could fill DOD's combat force structure and provide institutional support at an acceptable level of risk.

Although DOD's 2006 QDR concluded that the Army and Marine Corps should plan to stabilize their personnel levels at 482,400 and 175,000 active personnel respectively, by 2012, in February 2007 the President's fiscal year 2008 budget submission documented a plan to permanently increase the size of the active components of the Army by 65,000 to 547,400 and the Marine Corps by 27,000 to 202,000 over the next 5 years; and the Army National Guard by 8,200 to 358,200 and the U.S. Army Reserve by 6,000 to 206,000 by 2013. Shortly after the increase was announced, we testified before Congress³² that DOD's record in providing an analytically driven basis for requested military personnel levels needs to be improved and suggested that Congress should carefully weigh the long-term costs and benefits in evaluating DOD's proposal for the increases. Both the Army and Marine Corps are coping with additional demands that were not fully reflected in the QDR. For example, the Marine Corps decided to initiate a

³² [GAO-07-397T](#).

DOD Did Not Conduct an Analytically Sound Risk Assessment of Its Proposed Force Structure

new study to assess active military personnel requirements shortly after the 2006 QDR was completed due to its high pace of operations and the QDR-directed changes in force structure, such as establishing a Special Operations Command requiring about 2,600 military personnel. Without performing a comprehensive analysis of the number of personnel it needs, DOD cannot ensure that its military and civilian personnel levels reflect the number of personnel needed to execute the defense strategy. Further it cannot ensure that it has a sufficient basis for understanding the risks associated with different levels of military and civilian personnel. For example, while too many active military personnel could be inefficient and costly, having too few could result in other negative consequences, such as the inability to provide the capabilities that the military forces need to deter and defeat adversaries.

During the 2006 QDR, the risk assessments conducted by the Secretary of Defense and the Chairman of the Joint Chiefs of Staff did not fully apply DOD's risk management framework to demonstrate how risks associated with its proposed force structure were evaluated.³³ DOD introduced its risk management approach in 2001; however, we have reported that it has faced difficulty implementing this approach.³⁴ For example, we found that DOD faced challenges in integrating its risk management framework and reform initiatives into a unified management approach. We have reported that an emerging challenge for the federal government involves the need for completion of comprehensive national threat and risk assessments in a variety of areas.³⁵ For example, evolving requirements from the changing security environment, coupled with increasingly limited fiscal resources across the federal government, emphasize the need for agencies to adopt a sound approach to establishing resource decisions. We have advocated that the federal government, including DOD, adopt a comprehensive risk management approach as a framework for decision making that fully links strategic goals to plans and budgets, assesses values and risks of various courses of actions as a tool for setting priorities and allocating resources,

³³The QDR legislation requires that the Secretary of Defense assess the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the national defense strategy. The legislation also requires that upon the completion of each QDR, the Chairman of the Joint Chiefs of Staff shall prepare and submit to the Secretary of Defense the Chairman's assessment of the review, including the assessment of risk. (10 U.S.C. §118.).

³⁴[GAO-06-13](#).

³⁵[GAO-05-325SP](#).

and provides for the use of performance measures to assess outcomes.³⁶ A risk management approach represents a series of analytical and managerial steps that can be used to assess risk, evaluate alternatives for reducing risks, choose among those alternatives, implement the alternatives, monitor their implementation, and that incorporate new information to adjust and revise the assessments and actions, as needed.³⁷ Further, such a data-driven risk assessment can provide a guide to help shape, focus, and prioritize investment decisions to develop capabilities.

A key reason why DOD did not apply its risk framework during the QDR is that it had difficulty in developing department-level measures that would be necessary to assess risk and as a result, the assessment tools were not available for use during the QDR. The QDR's study guidance tasked the QDR coordination group, led by officials in the Office of the Under Secretary of Defense (Policy), to review the QDR risk management guidelines and provide these guidelines to the QDR's study teams for review. The guidelines were to provide some examples of how to measure performance related to DOD's key areas identified in its framework—operational, force management, institutional, and future challenges. The QDR coordination group was to incorporate the study teams' feedback about recommended changes. Lastly, the QDR coordination group was to issue the guidelines and monitor the application of performance measures during the QDR. According to an official in the Office of the Under Secretary of Defense (Policy), the QDR coordination group had difficulty developing the measures and thus did not issue guidelines. As a result, the study teams did not have the assessment tools to assess risk during the QDR.

Since department-level measures for assessing risk were not available during the 2006 QDR, several of the study teams relied primarily on professional judgment to assess the risks of not investing in various capabilities. For example, the study team responsible for developing capabilities told us that they examined information about potential future threats and determined that DOD needed medical countermeasures to address the threat of genetically engineered biological agents. Members of the study team discussed the consequences of not developing the medical procedures and treatments that would be needed to increase survival rates if U.S. military personnel were to encounter the highly advanced genetic

³⁶ GAO, *High-Risk Series: An Update*, [GAO-05-207](#) (Washington, D.C.: January 2005).

³⁷ [GAO-06-13](#).

material. Further, the Chairman of the Joint Chiefs of Staff was not tasked to use the risk management framework in assessing risks and did not choose to use it in his assessment. Rather, the Chairman's assessment examined the extent to which the 2006 QDR initiatives would address combatant commanders' operational needs for potential future requirements.

Without a sound analytical approach to assess risk during future QDRs, DOD will not have a sufficient basis to demonstrate how the risks associated with the capabilities of its proposed force structure were evaluated. Further, DOD may be unable to demonstrate how it will manage risk within current and expected resource levels. Without an analytically based risk assessment, DOD may not be able to prioritize and focus the nation's investments to combat 21st century security threats efficiently and wisely.

Options for Modifying Some Legislative Requirements Could Improve Usefulness of Future QDRs

The security environment of the 21st century has been characterized by conflicts that are very different from traditional wars among states. This environment has created the need for DOD to reexamine the fundamental operations of the department and the capabilities needed to continue to execute its missions. In addition, DOD has created new organizations, such as the U.S. Northern Command and the Assistant Secretary of Defense for Homeland Defense, to counter new threats to the homeland and support the federal response to any potential catastrophic event, natural, or man-made. Through our discussions with defense analysts, we have identified options for modifying several QDR legislative requirements that could be considered in light of the changed security environment, to make the QDR process and report more useful to Congress and DOD. The QDR legislation contains numerous issues for DOD to address, some that require reporting on broad issues, such as the national defense strategy and the force structure needed to execute that strategy, and some that are more detailed, such as the requirement that DOD examine the appropriate ratio of combat forces to support forces under the national defense strategy. Many defense analysts we spoke with thought some of the strategic issues are of great importance and should remain for future QDRs. Further, they believe DOD should focus its efforts on providing more information on the analytic basis for its key assumptions and strategic planning decisions. However, they also asserted that several of the QDR's detailed reporting elements detract attention from strategic issues, are already required and reported under other laws, or are no longer relevant in the new security environment. Options to improve the usefulness of future QDRs include (1) clarifying expectations for how the

QDR should address the budget plan, (2) eliminating some reporting elements for the QDR legislation that could be addressed in different reports, (3) eliminating some reporting elements in the QDR legislation for issues that may no longer be as relevant due to changes in the security environment, and (4) establishing an independent advisory group to work with DOD prior to and during the QDR to provide alternative perspectives and analyses.

Strategic Focus of Some QDR Legislative Requirements Is Considered Useful for Establishing Defense Plans and Programs

Several defense analysts we spoke with asserted that the permanent requirement for DOD to conduct a comprehensive strategic review of the defense program every 4 years is important and that Congress should continue to require that DOD conduct future QDRs. Moreover, several defense analysts acknowledge that certain key requirements remain critical to the QDR's purpose of fundamentally reassessing the defense strategy and program. Specifically, the requirements that task the Secretary of Defense to (1) delineate a defense strategy and (2) define sufficient force structure, force modernization, budget plan, and other elements of a defense program that could successfully execute the full range of missions called for by the defense strategy at low to medium risk over 20 years were seen as critical elements needed to ensure that Congress understands DOD's strategies and plans. Several defense analysts told us that it is in the national interest to ensure that DOD conducts the kind of long-range strategic planning that can provide meaningful recommendations for meeting future national security challenges and that enables debate on the costs and benefits of requirements for future military and capabilities as well as risks in capability gaps in light of national fiscal challenges.

The QDR legislation also directs DOD to define the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the national defense strategy in the QDR and include a comprehensive discussion of the force structure best suited to implement that strategy at low-to-moderate level of risk. Analysts saw these areas as important for DOD to provide Congress the assurance that there is a sound analytical basis for its risk assessment that includes how DOD identified risks and evaluated alternatives for reducing risks. Additionally, analysts viewed this discussion as important in assuring that the department has incorporated a variety of perspectives in its risk assessments. Some analysts stated that the requirements to discuss the assumed or defined national security interests, the threats to the assumed or defined national security interests, and the scenarios developed in the examination of those threats are several key elements that should remain

to enable the department to demonstrate that principles of risk assessment have been addressed. Similarly, analysts suggest that the Chairman of the Joint Chiefs of Staff's requirement to assess the results of the QDR review, including an independent assessment of risk, is helpful to provide another assessment that DOD and Congress can use to understand the risks associated with the force structure and consider the courses of actions the department might want to take to reduce risks.

Legislative Options Are Available to Improve Usefulness of Future QDRs

Some DOD defense analysts told us that the QDR legislation includes numerous detailed requirements that may impede DOD's focus on high-priority areas. Based on our discussions with analysts, we identified several options that Congress should consider to enhance the focus of future QDRs on high-priority issues and improve the thoroughness of DOD's analysis:

- **Clarify expectations for how the QDR should address the budget plan that supports the national defense strategy.** The QDR legislation has several reporting elements that relate to budget planning to support the defense strategy. First, the QDR legislation requires DOD "to delineate a national defense strategy..." and "to identify the budget plan that would be required to provide sufficient resources to execute successfully the full range of missions called for in that national defense strategy at a low-to-moderate level of risk."³⁸ Second, the legislation requires DOD "to conduct a comprehensive examination...of the national defense strategy...with a view toward establishing a defense program for the next 20 years." Third, based on recent changes to the legislation that will apply to the next QDR in 2010 as well as future QDRs, DOD is required to "make recommendations that are not constrained to comply with the budget submitted to Congress by the President."

Some defense analysts raised concerns about whether these reporting requirements provide sufficient and clear guidance for DOD to use in conducting QDRs. For example, they questioned whether the planning time frame of 20 years established by the QDR legislation is most useful in providing Congress with information to perform its oversight of the defense program. Although DOD officials and defense analysts acknowledged the benefits of forecasting threats and capabilities for a 20-year period, they stated it would be difficult to develop a detailed

³⁸DOD is also required to identify any additional resources (beyond those programmed in the current future years defense program) required to achieve such a level of risk.

budget plan for a 20-year period given the uncertain nature of threats in the new security environment. Further, analysts asserted that rather than enabling DOD to set strategic priorities without regard to current budgets, the requirement to “make recommendations that are not constrained to comply with the budget...,” could lead the services and the capability portfolio managers to push for inclusion of every program in their plans. This could make it more difficult for DOD to prioritize investments to meet key capability needs and assess the affordability of new capabilities across the department.

Moreover, DOD’s three QDR reports since 1997 have not fully described DOD’s methodology or approach for assessing its budget needs or budget plans that explained how DOD intended to fund the full range of missions called for in the national defense strategy. For the 2006 QDR, DOD included several QDR initiatives in the President’s fiscal year 2007 budget that was submitted to Congress at the same time as the QDR report but stated that it would continue to define a budget plan for the QDR by identifying the funding details in DOD’s future years defense program for fiscal years 2008 through 2013. In addition, the report did not provide information about the extent to which DOD considered the long-term affordability of the overall defense program. We have emphasized in previous reports that the federal government now faces increasing fiscal challenges, and DOD may face increasing competition for federal dollars.³⁹ Further, in November 2005, we reported that DOD has not demonstrated discipline in its requirements and budgeting processes, and its costly plans for transforming military operations and expensive acquisitions may not be affordable in light of the serious budget pressures facing the nation.⁴⁰ For example, we reported that DOD’s planned annual investment in acquisition programs it has already begun is expected to rise from \$149 billion in fiscal year 2005 to \$178 billion in fiscal year 2011. Given these pressures, Congress may want a clearer view of how DOD should budget for the capabilities associated with the proposed force structure, and how it evaluated the trade-offs in capabilities to maximize the effectiveness of future investments. If Congress decides that it needs additional budget-related information to carry out its oversight of future QDRs, then it might consider clarifying the reporting element relating to the required budget plan to specify what information DOD should include

³⁹For example, see [GAO-05-325SP](#).

⁴⁰GAO, *DOD Acquisition Outcomes: A Case for Change*, [GAO-06-257T](#) (Washington, D.C.: Nov. 15, 2005).

in the QDR. Further, Congress may want to consider clarifying its expectations for the information DOD provides in the QDR as to how it has addressed the long-term affordability challenges of transforming military operations.

- **Eliminate some reporting elements in the QDR legislation for issues that could be addressed in different reports.** According to some defense analysts, some requirements contained in the QDR legislation are not essential to the strategic purpose of the QDR and may divert DOD's focus from that strategic purpose. While important, some reporting elements are already examined in other DOD reviews, and Congress has access to the results of these periodic reviews. These reporting elements include the following:
 - An evaluation of "the strategic and tactical airlift, sealift, and ground transportation capabilities required to support the national defense strategy." In November 2002 we reported that the QDR may not be the appropriate venue for addressing mobility issues because examination of this issue requires detailed analysis that can best be conducted after DOD decides on a defense strategy, identifies a range of planning scenarios consistent with the new strategy, and completes its detailed analysis of requirements for combat forces.⁴¹ Furthermore, DOD routinely conducts analyses of its mobility requirements outside of the QDR process, according to DOD officials. Since 1992, DOD has issued four major analyses of the U.S. military strategic lift requirements: the 1992 Mobility Requirements Study, Bottom Up Review; the 1995 Bottom Up Review Update; the 2001 Mobility Requirements Study—2005, issued in 2001; and the Mobility Capability Study, issued in 2005.
 - An assessment of the "advisability of revisions to the Unified Command Plan as a result of the national defense strategy." DOD has a process for assessing the Unified Command Plan and is required to report changes to the plan to Congress under other legislation. Specifically, the Chairman of the Joint Chiefs of Staff is required to review periodically and not less than every 2 years the missions, responsibilities, and forces of each combatant command and recommend any changes to the President, through the Secretary of Defense.⁴² This legislation also requires that, except during times of hostilities or the imminent threat of hostilities, the President notify

⁴¹GAO-03-13.

⁴²10 U.S.C. §161(b).

Congress not more than 60 days after either establishing a new combatant command or significantly revising the missions, responsibilities, or force structure of an existing command. As such, a major event or change in the political or security landscape could trigger the need for a change in the plan. For example, in the spring of 2007, the President announced that DOD intends to establish a U.S. Africa Command to oversee military operations on the African continent. According to an OSD official, DOD will revise the 2002 Unified Command Plan and report on the changes in the military command structure after plans for U.S. Africa Command are more fully developed.

- **Eliminate some reporting elements in the QDR legislation for issues that may no longer be as relevant due to changes in the security environment.** As we reported in our assessment of DOD's 2001 QDR,⁴³ a DOD official and some defense analysts said that two reporting elements should be eliminated because they are related to the allocation of forces under the old two-major-theater-war construct, which is more limited than DOD's current force planning construct that includes a broader range of threats. These reporting elements include the following:
 - A discussion of the "appropriate ratio of combat forces to support forces (commonly referred to as the 'tooth-to-tail ratio') under the national defense strategy." DOD's goal has been to reduce the number of personnel and costs associated with the support forces, or "tail." However, during the 2006 QDR process and report DOD did not identify which units should be considered support and which should be considered combat. Given rapidly changing technologies, differentiating between support and combat troops has become increasingly irrelevant and difficult to measure. For example, as the United States moves toward acquiring greater numbers of unmanned aircraft piloted from remote computer terminals and relies increasingly on space-based assets operated by personnel in the United States, it will be more difficult to distinguish between combat and support personnel.
 - Assessments of "the extent to which resources must be shifted among two or more theaters under the national defense strategy in the event of conflict in such theaters," and the assumptions used regarding "warning time." Both these reporting elements relate to the allocation

⁴³ [GAO-03-13](#).

of forces under the old two-major-theater-war planning construct. Under this construct, the amount of time that was assumed available for warning and the separation time between major theater wars were critical factors in planning the size and composition of U.S. forces and assessing operational risk, particularly for assets that might need to be shifted between theaters. However, under the new defense strategy, along with DOD's new force planning construct, DOD assumes that it will continue to be involved in a wide range of military operations around the world. Given the full spectrum of threats that DOD is planning to address, it may be more useful for DOD's force structure assessments to be tied to requirements for a broad range of potential threats.

- **Establish an independent advisory group to work with DOD prior to or during the QDR to provide alternative perspectives and analyses.** As part of our assessment of the 1997 QDR, we suggested that a congressionally mandated panel, such as the 1997 National Defense Panel, could be used to encourage DOD to consider a wider range of strategy, force structure, and modernization options. Specifically, we noted that such a review panel, if it preceded the QDR, could be important because it is extremely challenging for DOD to conduct a fundamental reexamination of defense needs, given that its culture rewards consensus building and often makes it difficult to gain support for alternatives that challenge the status quo. One of the recent additions to the QDR legislation requires the establishment of an independent panel to conduct an assessment of future QDRs after the process is completed; however, most defense analysts we spoke with agreed that an independent analysis of key issues for the Secretary of Defense either prior to or during the next review would complement a post-QDR assessment and strengthen DOD's ability to develop its strategic priorities and conduct a comprehensive force structure and capabilities analysis. The analysts agreed that an advisory group established before or during the QDR process could function as an independent analytical team to challenge DOD's thinking, recommend issues for DOD to review and review assumptions, and provide alternative perspectives in activities such as identifying alternative force structures and capabilities, and performing risk assessments. An independent group's assessments could be useful to DOD in future QDRs to identify the capabilities of the nation's current and future adversaries because potential enemies will likely be more difficult to target than the adversaries of the Cold War era.

Conclusions

The 2006 QDR represented an opportunity for DOD to perform a comprehensive review of the national defense strategy for the first time

since military forces have been engaged in the Global War on Terrorism. Sustained DOD leadership facilitated decision making, and extensive collaboration with interagency partners and allies provided a range of perspectives on threats and capabilities. However, weaknesses in DOD's analysis of force structure, personnel requirements, and risk limited its reassessment of the national defense strategy and U.S. military forces. For example, by not fully incorporating capabilities-based planning into a comprehensive assessment of alternative force structures, DOD could not comprehensively identify capabilities gaps, associated operational risks, and trade-offs that must be made to efficiently use limited fiscal resources. Therefore, DOD was not in a good position to assure Congress that it identified the force best suited to execute the national defense strategy. Moreover, the Secretary of Defense's announcement of plans to increase the sizes of the Army and Marine Corps in January 2007 calls into question the analytical basis of the QDR conclusion that the number of personnel and the size of the force structure for the services were appropriate to meet current and future requirements. Further, without a comprehensive approach to assessing risk, DOD's 2006 QDR did not provide a sufficient basis to demonstrate how risks associated with its proposed force structure were evaluated. Unless DOD takes steps to provide comprehensive analytical support for significant decisions in future QDRs, the department will not be in the best position to distinguish between the capabilities it needs to execute the defense strategy versus those capabilities it wants but may not be able to afford at a time when the nation's fiscal challenges are growing. Moreover, Congress will be unable to effectively evaluate the benefits, costs, and risks associated with decisions flowing from future QDRs.

Opportunities exist for Congress to consider further changes to the QDR legislation that may encourage DOD to concentrate its efforts on high-priority matters such as developing a defense strategy and identifying the force structure best suited to execute the strategy. Unless Congress clearly identifies its expectations for DOD to develop a budget plan that supports the strategy, DOD may not thoroughly address the challenges it will face as it competes with other federal agencies and programs for taxpayers' dollars and may spend considerable effort assessing options for capabilities that could be unaffordable given our nation's fiscal challenges. Moreover, the large number of reporting elements in the QDR legislation presents DOD with a challenge in conducting data-driven comprehensive analyses of many significant complex issues. A reassessment of the QDR's scope could provide greater assurances that DOD will thoroughly assess and report on the most critical security issues that the nation faces and could help it decide what actions it needs to take to establish the most

effective military force to counter 21st century threats. Lastly, although Congress has established a new legislative requirement for an independent panel to conduct a post-QDR review, there is currently no mechanism for Congress and the Secretary of Defense to obtain an independent perspective prior to and during the QDR. Without an independent group of advisors that could provide comprehensive data-driven analyses to DOD prior to and during future QDR reviews, DOD may not consider a wider range of perspectives, such as force structure options, thus limiting the analytic basis of its QDR decisions.

Recommendations for Executive Action

To enhance the usefulness of future QDRs and assist congressional oversight, we recommend that the Secretary of Defense take the following two actions:

- Develop appropriate methods for the department to use in a comprehensive, data-driven capabilities-based assessments of alternative force structures and personnel requirements during future QDRs.
- Develop appropriate methods for the department to use in conducting a comprehensive, data-driven approach to assess the risks associated with capabilities of its proposed force structure during future QDRs.

Matters for Congressional Consideration

To improve the usefulness of future QDRs, Congress should consider revisions to the QDR legislation, including (1) clarifying expectations on how the QDR should address the budget plan that supports the national defense strategy, (2) eliminating some detailed reporting elements that could be addressed in different reports and may no longer be relevant due to changes in the security environment, and (3) requiring an independent panel to provide advice and alternatives to the Secretary of Defense before and during the QDR process.

Agency Comments and Our Evaluation

The Principal Deputy Under Secretary of Defense for Policy provided written comments on a draft of this report. The department partially agreed with our recommendations and agreed with the matters we raised for congressional consideration regarding possible changes to the QDR legislative language. In addition, the comments provided information about steps the department is taking to update its methodologies for analyzing force structure requirements and assessing risks. DOD's comments are reprinted in their entirety in appendix IV. DOD also provided technical comments which we incorporated as appropriate.

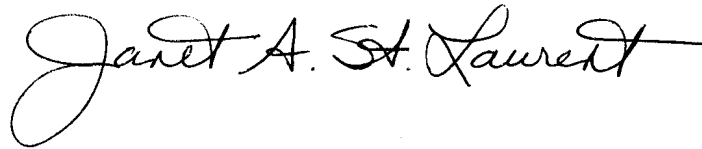
In its comments, the department partially agreed with our recommendation that the Secretary of Defense develop appropriate methods for conducting comprehensive, data-driven capabilities-based assessments of alternative force structures and personnel requirements. DOD agreed with our conclusion that the 2006 QDR did not comprehensively assess alternatives to planned structure; rather, its analysis was limited to identifying shortfalls in current structure when compared to various illustrative operational scenarios. However, in its comments, the department noted that it has developed or is developing new illustrative security environments to use to demonstrate the demands associated with force structures and personnel requirements for each strategic environment. The department also pointed out the difficulty of undertaking an evaluation of the defense strategy and producing a defense program within the QDR process, as required under current QDR legislation. It said that as the department further develops the underlying assumptions for the force planning construct and refreshes the illustrative scenarios available for analysis, it will be in a better position to analyze overall needed capabilities, including personnel requirements. Finally, the department noted that the 2006 QDR was based on information available in 2005, which included a different demand than what military forces face today. At that time, the department's collective decision, approved by the then Secretary of Defense, was that the size of the force was about right, although the force mix should be adjusted. As a result of this change in demand since the 2006 QDR, according to DOD's comments, DOD has responded by increasing Army and Marine Corps end strength. We believe that the steps DOD outlined in its comments, such as revising the illustrative scenarios and developing force demands for new security environments, will help DOD to improve its force structure analyses. However, we believe that a comprehensive assessment that identifies and documents the basis for trade-off decisions across capability areas is critical to developing the force structure best suited to execute the defense strategy. Until DOD undertakes a comprehensive assessment of alternative force structure options that clearly documents how the department reached its force structure decisions, it will not be in the best position to determine the force structure best suited to execute the missions called for in the defense strategy at low-to-moderate risk.

DOD also partially concurred with our recommendation to develop appropriate methods for conducting comprehensive, data-driven assessments of the risks associated with the capabilities of its proposed force structure during future QDRs. In its comments, the department agreed that improving the department's risk methodology is necessary to appropriately assess risk. It noted that in addition to risks associated with

capabilities, strategic, operational, force management, and institutional risks need to be addressed in a risk assessment methodology. The department cited several post-QDR initiatives the department is undertaking to improve how the department assesses risk, including new measures to help link strategic goals to plans and budgets and develop performance metrics. Also in its comments, the department described efforts to strengthen and integrate existing assessments to allow decision makers to better set priorities, allocate resources, and assess outcomes and risks and stated its intent to improve risk assessment methods to inform risk measurement in future QDRs. We agree that assessing risk associated with capabilities is only one type of risk facing the department and that the initiatives the department is undertaking to link strategic goals with plans and budgets and improve its risk assessment methodology can, when implemented, help it improve its ability to identify and manage risks. Until the department's risk management framework is sufficiently developed that it can support comprehensive assessments of risk across domains, assess progress toward accomplishing strategic goals, and provide senior leaders reliable analysis to inform decisions among alternative actions, DOD will not be in the best position to identify or assess risks to establish investment priorities.

DOD also provided its views on matters we raised for congressional consideration in a draft of this review regarding possible revisions to the QDR legislation. Specifically, DOD agreed with clarifying expectations for addressing the budget plan and eliminating some reporting requirements. In a draft of this report, we originally raised as a matter for congressional consideration broadening the QDR legislation by requiring the legislatively required independent advisory panel, which would provide a post-QDR critique of the results of the process, to provide DOD with alternative perspectives and analysis prior to or during the QDR. The department stated that having an independent panel that could provide advice and alternatives to the Secretary of Defense before and during the QDR process would be useful. However, it raised the concern that tasking the same independent panel that is required to provide a post-QDR critique to also perform an advisory function before and during the review could create mistrust between the department leadership and the independent advisory panel. To address DOD's concerns we have modified the matter for consideration to suggest that an independent panel be required to provide advice and alternatives to the Secretary of Defense before and during the QDR. This change is intended to provide Congress with the flexibility to establish separate independent panels to provide advice prior to and following the next QDR.

We are sending copies of this report to other appropriate congressional committees and the Secretary of Defense. We will also make copies available to other interested parties upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>. If you have any questions about this report, please contact me at (202) 512-4402. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Major contributors to this report are listed in appendix V.

A handwritten signature in black ink that reads "Janet A. St. Laurent". The signature is written in a cursive style with a large, looping initial "J".

Janet A. St. Laurent
Director, Defense Capabilities
and Management

Appendix I: Scope and Methodology

To assess the strengths and weaknesses of the Department of Defense's (DOD) approach and methodology for the 2006 Quadrennial Defense Review (QDR), we examined the relevant documentation including the John Warner National Defense Authorization Act for Fiscal Year 2007; the National Defense Strategy of the United States of America (March 2005); the 1997, 2001, and 2006 QDRs; the QDR Terms of Reference (March 2005); the Under Secretary of Defense (Policy) issue papers for the QDR's focus areas; and the 2006 QDR's study teams' briefings and other documentation for the DOD's senior-level review group, as well as our reports on aspects of previous QDRs. We also examined documents identifying the methodology and results of the QDR's key force structure analyses and risk assessments. We reviewed studies on capabilities-based planning and compared the key elements of capabilities-based planning identified in the studies to the QDR's Terms of Reference and DOD's documented methodology for the Operational Availability 06 Study to assess the extent to which capabilities-based planning concepts were used during the QDR. We also discussed these issues with officials from the Office of the Under Secretary of Defense (Policy); the Office of Program Analysis and Evaluation; the Joint Chiefs of Staff Directorate for Force Assessment; U.S. Special Operations Command; and officials from the Army, Air Force, and Marine Corps who participated in the QDR process. To understand how DOD established processes to ensure that QDR initiatives are implemented, we examined internal DOD documents, DOD's January 2007 quarterly report to Congress on the status of implementation of the 2006 QDR, and post-QDR study teams' reports to understand the methodology that was developed to oversee implementation. We discussed the implementation status of the QDR initiatives with officials from the Office of the Director, Administration and Management and the Under Secretary of Defense (Policy). We did not undertake an assessment of the effectiveness of implementation of the QDR initiatives because it was outside of scope of our review. We obtained and examined documents from the Deputy Secretary of Defense and the post-QDR study teams and discussed the status of the teams' work with officials from the Under Secretary of Defense (Policy), the Institutional Reform and Governance team, and the Joint Command and Control and Battlespace Awareness capability portfolios. Moreover, we reviewed the internal controls on DOD's tracking system for QDR initiatives and evaluated the reliability of that data for DOD's use. We applied evidence standards from the generally accepted government auditing standards in our evaluation of DOD's database. As a result, we determined the information we used meets these evidence standards and is sufficiently reliable for our purposes.

To determine whether changes to the QDR legislation could improve the usefulness of future reviews including any changes needed to better reflect the security conditions of the 21st century, we examined a wide variety of studies that discussed the strengths and weaknesses of DOD's 2006 QDR and prior reviews. Our review included studies from the RAND Corporation, the National Defense University, and the Center for Strategic and Budgetary Assessments. To obtain opinions and develop options to improve the usefulness of future QDRs, we interviewed several DOD officials who participated in the 2006 QDR from the services and the Joint Staff. Further, we met with 11 defense analysts who had detailed knowledge of DOD's QDR process and/or participated in DOD's 1997, 2001, or 2006 QDRs. We used a standard set of questions to interview each of these analysts to ensure we consistently discussed the reporting elements of the QDR legislation and DOD's approach and methods for its three QDRs. To develop the questions, we reviewed the QDR legislation, DOD's QDR reports, and our prior work on DOD's strategic reviews. One of the defense analysts served in various positions within and outside of DOD such as the former Chairman of the Defense Science Board and the Chairman of the 1997 National Defense Panel. Other defense analysts were senior officials from the following organizations: the American Enterprise Institute, the Center for American Progress, the Center for Naval Analysis, the Center for a New American Security, the Center for Strategic and Budgetary Assessments, the Center for Strategic and International Studies, the Lexington Institute, the National Defense University's Institute for National Strategic Studies, the RAND Corporation, and the Heritage Foundation. Based on our review of QDR literature and our discussions with DOD analysts, we developed a matrix summarizing these individuals' concerns regarding the QDR legislative requirements and their views on the options to address them.

Our work was conducted in the Washington, D.C., metropolitan area and Tampa, Florida. We performed our review from May 2006 through May 2007 in accordance with generally accepted government auditing standards.

Appendix II: Quadrennial Defense Review

Legislation in Effect for the 2006 Quadrennial Defense Review

TITLE 10 U.S.C. §118. Quadrennial Defense Review

(a) Review required.—The Secretary of Defense shall every four years, during a year following a year evenly divisible by four, conduct a comprehensive examination (to be known as a “quadrennial defense review”) of the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program and policies of the United States with a view toward determining and expressing the defense strategy of the United States and establishing a defense program for the next 20 years. Each such quadrennial defense review shall be conducted in consultation with the Chairman of the Joint Chiefs of Staff.

(b) Conduct of review.—Each quadrennial defense review shall be conducted so as—

(1) to delineate a national defense strategy consistent with the most recent National Security Strategy prescribed by the President pursuant to section 108 of the National Security Act of 1947 (50 U.S.C.404a);

(2) to define sufficient force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program of the United States associated with that national defense strategy that would be required to execute successfully the full range of missions called for in that national defense strategy;

(3) to identify (A) the budget plan that would be required to provide sufficient resources to execute successfully the full range of missions called for in that national defense strategy at a low-to-moderate level of risk, and (B) any additional resources (beyond those programmed in the current future-years defense program) required to achieve such a level of risk; and

(c) Assessment of risk.—The assessment of risk for the purposes of subsection (b) shall be undertaken by the Secretary of Defense in consultation with the Chairman of the Joint Chiefs of Staff. That assessment shall define the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the national defense strategy.

(d) Submission of QDR to Congressional committees.—The Secretary shall submit a report on each quadrennial defense review to the Committees on Armed Services of the Senate and the House of

Representatives. The report shall be submitted in the year following the year in which the review is conducted, but not later than the date on which the President submits the budget for the next fiscal year to Congress under section 1105(a) of title 31. The report shall include the following:

- (1) The results of the review, including a comprehensive discussion of the national defense strategy of the United States, the strategic planning guidance, and the force structure best suited to implement that strategy at a low-to-moderate level of risk.
- (2) The assumed or defined national security interests of the United States that inform the national defense strategy defined in the review.
- (3) The threats to the assumed or defined national security interests of the United States that were examined for the purposes of the review and the scenarios developed in the examination of those threats.
- (4) The assumptions used in the review, including assumptions relating to— (A) the status of readiness of United States forces; (B) the cooperation of allies, mission-sharing and additional benefits to and burdens on United States forces resulting from coalition operations; (C) warning times; (D) levels of engagement in operations other than war and smaller-scale contingencies and withdrawal from such operations and contingencies; and (E) the intensity, duration, and military and political end-states of conflicts and smaller-scale contingencies.
- (5) The effect on the force structure and on readiness for high-intensity combat of preparations for and participation in operations other than war and smaller-scale contingencies.
- (6) The manpower and sustainment policies required under the national defense strategy to support engagement in conflicts lasting longer than 120 days.
- (7) The anticipated roles and missions of the reserve components in the national defense strategy and the strength, capabilities, and equipment necessary to assure that the reserve components can capably discharge those roles and missions.
- (8) The appropriate ratio of combat forces to support forces (commonly referred to as the ‘tooth-to-tail’ ratio) under the national defense strategy, including, in particular, the appropriate number and size of headquarters units and Defense Agencies for that purpose.

(9) The strategic and tactical air-lift, sea-lift, and ground transportation capabilities required to support the national defense strategy.

(10) The forward presence, pre-positioning, and other anticipatory deployments necessary under the national defense strategy for conflict deterrence and adequate military response to anticipated conflicts.

(11) The extent to which resources must be shifted among two or more theaters under the national defense strategy in the event of conflict in such theaters.

(12) The advisability of revisions to the Unified Command Plan as a result of the national defense strategy.

(13) The effect on force structure of the use by the armed forces of technologies anticipated to be available for the ensuing 20 years.

(14) The national defense mission of the Coast Guard.

(15) Any other matter the Secretary considers appropriate.

(e) CJCS review.—(1) Upon the completion of each review under subsection (a), the Chairman of the Joint Chiefs of Staff shall prepare and submit to the Secretary of Defense the Chairman's assessment of the review, including the Chairman's assessment of risk.

(2) The Chairman shall include as part of that assessment the Chairman's assessment of the assignment of functions (or roles and missions) to the armed forces, together with any recommendations for changes in assignment that the Chairman considers necessary to achieve maximum efficiency of the armed forces. In preparing the assessment under this paragraph, the Chairman shall consider (among other matters) the following:

(A) unnecessary duplication of efforts among the armed forces.

(B) changes in technology that can be applied effectively to warfare.

(3) The Chairman's assessment shall be submitted to the Secretary in time for the inclusion of the assessment in the report. The Secretary shall include the Chairman's assessment, together with the Secretary's comments, in the report in its entirety.

Appendix III: Summary of New Changes in 10 U.S.C. §118 for Future Quadrennial Defense Reviews

This appendix provides a summary of changes to the Quadrennial Defense Review (QDR) legislation (10 U.S.C. §118) as a result of the John Warner National Defense Authorization Act for Fiscal Year 2007.¹ The new requirements will be in effect when the Department of Defense issues its next quadrennial review in 2010.

- The QDR should make recommendations that are not constrained to comply with the budget submitted to Congress by the President.
- The review shall include the following new reporting elements:
 - the specific capabilities, including the general number and type of specific military platforms, needed to achieve the strategic and warfighting objectives identified in the review; and
 - the homeland defense and support to civil authority missions of the active and reserve components, including the organization and capabilities required for the active and reserve components to discharge each such mission.
- The Chairman shall describe the capabilities needed to address the risk that he identified in his risk assessment.
- The Secretary of Defense shall establish an independent panel to conduct an assessment of the QDR not later than 6 months before the date on which the QDR will be submitted.
 - Not later than 3 months after the date on which the QDR is submitted, the panel shall submit an assessment of the review, including the review's recommendations, the stated and implied assumptions incorporated in the review, and the vulnerabilities of the strategy and force structure underlying the review.
 - The panel's assessment shall include analyses of the trends, asymmetries, and concepts of operations that characterize the military balance with potential adversaries, focusing on the strategic approaches of possible opposing forces.

¹Pub. L. No. 109-364 §1031 (2006).

Appendix IV: DOD Comments



POLICY

PRINCIPAL DEPUTY UNDER SECRETARY
OF DEFENSE
2100 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2100

JUL 19 2007

Ms. Janet A. St Laurent
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. St Laurent:

This is the Department of Defense response to the GAO Draft Report, GAO-07-709C, "QUADRENNIAL DEFENSE REVIEW: Future Reviews Could Benefit from Improved Department of Defense Analyses and Changes to Legislative Requirements," dated June 6, 2007 (GAO Code 350845).

The Department partially concurs with the draft report's recommendations. The rationale for the Department's position is enclosed.

The Department appreciates the opportunity to comment on the draft report. Technical comments were provided separately. For further questions concerning this report, please contact Ms. Elisabeth Cordray at (703) 697-2451.

Sincerely,


Ryan Henry

Enclosure



GAO DRAFT REPORT – DATED JUNE 6, 2007
GAO CODE 350845 /GAO-07-709C

"QUADRENNIAL DEFENSE REVIEW: Future Reviews Could Benefit from Improved
Department of Defense Analyses and Changes to Legislative Requirements"

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense develop appropriate methods for the Department to use in conducting comprehensive, data-driven capabilities-based assessments of alternative force structures and personnel requirements during future Quadrennial Defense Reviews.

DOD RESPONSE: The Department of Defense partially concurs with Recommendation 1. It is accurate that the analysis performed to support the 2006 QDR did not *comprehensively* assess alternatives to planned force structure. However, DoD has sufficient methods for conducting data-driven capabilities-based assessments of alternative force structures and personnel requirements. As noted by GAO, the QDR analysis did examine alternative force structures and personnel requirements within particular capability areas. Each of the Services, the Joint Staff, and the Director for Program Analysis and Evaluation have analytical tools and methodologies used to assess alternative force structures and establish appropriate end strength levels to meet the needs of the defense strategy. The Department continuously improves its analytic processes through the analytic agenda, which establishes a range of illustrative scenarios to set potential demands, military concepts of operation and associated force structure, and a baseline set of data for analysis.

The Operational Availability 2006 (OA-06) study, the key QDR analytic tool, counted force demands and applied resources to determine shortfalls. In OA analysis, force structure and personnel requirements are derived using a set of particular concepts of operation. To comprehensively assess alternative force structures, the analysis would need to alter these concepts of operation for each illustrative scenario. In OA-06, there were 26 separate illustrative vignettes, with 26 separate concepts of operation. To produce an alternative force structure, analysts would need to produce different concepts of operation for each vignette. While such analysis was not undertaken comprehensively during the QDR, the methodology exists for assessing alternative force structures.

OA-06 analysis was also based on a set of analytic tools aligned to the previous strategy. The QDR updated the Department's Force Planning Construct, however, analysis was designed and executed using the pre-QDR guidance. The Department has developed a replacement to the Baseline Security Posture (BSP), the Steady-State Security Posture (SSSP), to demonstrate demands on the Department over time. The SSSP has five strategic environments or future themes, from which to form a basis for demand over time, and has developed or is developing a menu of different surge-inducing events to overlay on those Steady-State demands. Future

analysis will produce a series of demands with associated force structures and personnel requirements for each strategic environment, thus providing even more robust capability analysis. The Operational Availability 2008 study will be the Department's first comprehensive look at the revised Force Planning Construct.

The QDR is designed to evaluate the defense strategy and produce a defense program aligned to that strategy. It is not feasible to complete both of these tasks during the QDR process. The detail and complexity of the analysis required to align the entire defense program with a revised strategy extends well beyond the QDR, especially because a significant portion of the review process is spent revising the strategy. As in past reviews, the QDR represents the starting point of a four-year process to analyze the implications of a revised strategy and develop the best-suited defense program. As the Department further develops the underlying assumptions for the force planning construct and refreshes the illustrative scenarios available for analysis, it will be in a better position to analyze overall needed capabilities, to include personnel requirements.

Finally, all planning is based on assumptions, and changes to assumptions lead to changes in demand. QDR analysis on force structure and personnel requirements was based on the information available in 2005. The results of Departmental analysis informed its senior leadership as they discussed the need to increase the size of the force during the development of the QDR Terms of Reference. The collective decision, approved by the Secretary of Defense, was that while the size of the force was about right, the force mix (capabilities and personnel specialties) should be adjusted to meet current and emerging national security priorities. The 2006 QDR strategic environment was based on a different level of demand than what military forces face today. As a result of this change of demand, DoD responded by increasing Army and Marine Corps end strength. As its preface notes, the QDR Report represents a snapshot in time that must continually be reexamined.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense develop appropriate methods for the Department to use in conducting comprehensive, data-driven approach to assess the risks associated with capabilities of its proposed force structure during future Quadrennial Defense Reviews.

DOD RESPONSE: The Department of Defense partially concurs with Recommendation 2. GAO notes that the QDR coordination group failed to provide further risk guidance to each study team as directed in the Terms of Reference. As a result, the study teams inconsistently applied the risk management framework as options were presented for decision. Alternatively, the Department presented a consolidated analysis of risk at the November Strategic Planning Council. The Department's leadership found this approach to be an effective method for assessing the risk of proposed force structure decisions.

As outlined in the QDR Report, further development of the Department's risk methodology is necessary to appropriately assess risk. However, the Department's risk management framework must be designed to assess more than just risks associated with capabilities, as the

GAO recommends. Strategic, operational, force management, and institutional risk are also key facets of risk that must be addressed in any methodology. In order to fully address all of these aspects, the Department established the Institutional Reform and Governance execution roadmap.

This execution roadmap outlined several post-QDR initiatives to implement new measures that will help link strategic goals to plans and budgets, thereby helping the Department to better assess the risks of various courses of action. For instance, future strategic guidance will identify performance goals, which will be used by senior leaders in assessing progress towards those goals. Additionally, efforts are underway to identify metrics to measure progress in each of the risk areas. The roadmap also places renewed emphasis on performance assessment and feedback. One of the major roadmap initiatives is to strengthen and integrate existing assessment mechanisms to allow the Department's decisionmakers to better set priorities, allocate resources, and assess outcomes and risk. The Department is consolidating several individual assessments to produce a comprehensive joint assessment that will provide a view of risk across various missions, domains and timeframes. The comprehensive joint assessment will then provide the starting point for updating the Department's strategic guidance, performance goals, and associated plans and programs.

The Department will continue to improve its risk assessment methodology each year, drawing from best available industry, institutional, and international practices. These improvements will be captured in existing and emerging assessment processes and will inform risk measurement in future QDRs.

MATTERS FOR CONGRESSIONAL CONSIDERATION

The Department concurs with GAO's recommended legislative revisions regarding clarity of expectations for addressing the budget plan and eliminating outdated reporting elements. It is important for Congress and the Executive Branch to work in close collaboration to tailor individual QDRs to answer the most pressing strategic issues. Close collaboration is necessary to ensure that both Congress and the Secretary of Defense find the QDR a useful tool in assessing future defense needs.

The Department partially concurs with the GAO recommendation to require the newly established independent advisory panel to provide DoD with alternative perspectives and analyses prior to and during the QDR. The QDR 2006 benefited greatly from the analysis provided to the Secretary of Defense by a "red team" of defense experts modeled after the 1997 National Defense Panel. The benefit was derived from open discussions that produced a trusting and free environment for red team members to challenge assumptions and analysis. To create such an environment, non-attribution was critical. Red team members and the Department's leadership knew their opinions, debates, and recommendations were protected.

The Department agrees with the usefulness of an independent advisory panel *prior to and during* the QDR. Using the same panel to provide alternative views to Congress *after* the QDR may create mistrust between the Department's leadership and the independent advisory panel and reduce the benefit to the QDR process.

Appendix V: GAO Contact and Staff Acknowledgments

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